

A NEW SPECIES OF *CINARA* FROM DELAWARE
(APHIDIDAE)

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Cinara lunata, n. sp.

Apterous viviparous female.—Length from vertex to end of anal plate 3.22 (3.00) mm. Width of head through the eyes .70 mm. Color of cleared mounted specimens as follows: Head dusky brown, transverse suture very much darker. Antennal segments I and II concolorous with head. Antennal segment III pale except for slightly dusky apex. Antennal segment IV with apical one third dusky. Antennal segment V with apical half dusky. All of antennal segment VI dusky. Prothorax with dorsum dusky. Meso and metathorax each with two dusky areas on the dorsum. All femora pale at the base, the pale area more extensive on the metathoracic femora, remainder of femora dark brown. Tibiae dark brown at the base, this followed by a pale region which gradually becomes dark brown. The dark area is much more extensive on the metathoracic tibiae. Tarsal segments dark brown. Dorsum of the abdomen with a few small scattered pigmented spots. Cornicles dusky brown, pigmented area anterior to cauda similar.

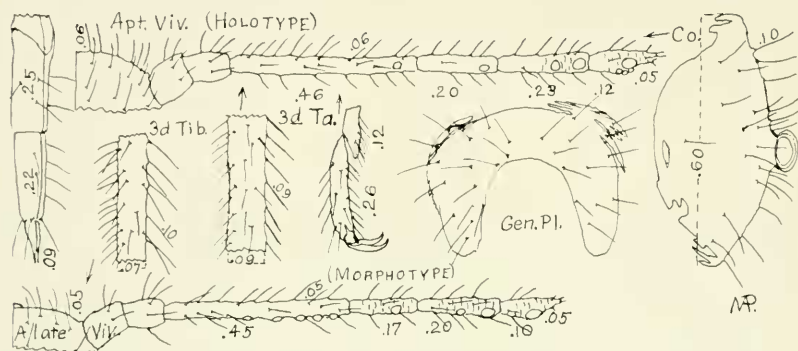
HEAD AND THORAX. Antennal segments with the following lengths: III .46 (.48)mm., IV .20 (.18) mm., V .23 (.21)mm., VI .2 + .05 (.09 + .05)mm. Third and fourth antennal segments each with a small sensorium. Fifth antennal segment with two small sensoria. Hair on antennae sparse, fine, set at an angle slightly more than 45 degrees, shorter than width of segment, on III .06 mm long. Sixth antennal segment club shaped, primary sensorium very distinct. Fifth and sixth antennal segments strongly imbricated. Rostrum not fully extended, last three segments with the following lengths: .25, .22 and .06 mm. Ocular tubercles small, but very distinct. Anterior margin of head very much arched. Dorsum of head with coarse rather spinelike hairs, the hairs not so numerous on the posterior half. Mesoternal tubercle very poorly developed. Metathoracic femora 1.27 (1.23) mm. long. Metathoracic tibiae 2.13 (2.25) mm. long. Hairs on tibiae not numerous, fine, more upstanding on basal half. Hairs on tibiae about .09 mm. long but not all of the same length, hairs on inner margin of tibiae less upstanding and more numerous. All hairs on tibiae shorter than width of tibiae. Metatarsal I .12 mm. long. Metatarsal II 0.26 mm. long. First metatarsal with about twelve hairs on the ventral surface. Hairs on dorsum of metatarsal II fewer than on ventral surface.

ABDOMEN. Cornicles with base .60 (.61)mm. Apex of cornicles with distinct rim. Hairs on cornicles few, scarce on basal half. Hairs on dorsum of abdomen sparse, spinelike, not all of the same length, the shortest very short, the longest about .06 mm. the short hairs

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being the more numerous. Hairs on ventral surface of the body very numerous fine, about .07 mm. long.

Genital plate very narrow, with the posterior margin very deeply excavated, distinctly crescent shaped, imbricated. Pigmented area anterior to cauda not divided, imbricated, with about ten hairs on the posterior margin, these hairs are sharp pointed and about .09 mm. long. Anterior to this pigmented area there is a smaller area with a few short, rather spinelike hairs.



Cinara lunata n. sp.

Alate viviparous female.—Length from vertex to end of cauda 3.03 mm. Color similar to that of apterous female. Length of antennal segments as follows: III .45 mm., IV .17 mm., V .20 mm., VI .10 + .05 mm. Hair on antennae sparse, slightly longer than width of segment, set at an angle of about 45 degrees. Fourth antennal segment with four small secondary sensoria plus the primary sensorium. Fourth antennal segment with only the primary sensorium. Fifth antennal segment with one secondary and the primary sensorium. Sixth antennal segment distinctly imbricated. Lateral and median lobes of thorax with hairs uniformly distributed over the surface. Wings not well mounted, but the media seems to be only once branched. Metathoracic femora 1.20 mm. long. Metathoracic tibiae 2.13 mm. Hairs on metathoracic tibiae about .10 mm. long, fine, with the hairs on the inner margin more numerous and those near the apex set at a lesser angle. Cornicles .45 mm. with a distinct restricted area. Hairs on cornicles few. Genital plate less deeply excavated than in the apterous female. Hairs on dorsum of abdomen not as spinelike as those on the dorsum of the apterous form. Hairs on ventral surface of the abdomen numerous, about .075 mm. long. Pigmented area anterior to cauda not as wide as in the apterous form.

In Tissot's key to apterous and alate females, Florida Entomologist 22: 34-35, 1939, this species keys with difficulty and with numerous questions to *Cinara carolina* Tissot. It differs from the

species described by Tissot in numerous ways. The genital plate is more of a crescent, the dorsum of the abdomen has fewer spots, the cornicles fewer hairs, fewer hairs on the tibiae. The hairs on the dorsum of the abdomen are also fewer and shorter.

HOST: *Pinus virginiana*, Petersburg, Delaware, May 29, 1957. Collected by H. E. Milliron. HOLOTYPE apterous viviparous female *morphotype* alate viviparous female, both mounted on same slide deposited in the United States National Museum.